UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,623	11/13/2003	Christian Behrens	16104-009001 / 2003P00802	2446

			EXAMINER
32864	7590	11/14/2006	TIMBLIN, ROBERT M

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ART UNIT	PAPER NUMBER
2167	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/713,623	BEHRENS ET AL.
	Examiner	Art Unit	
	Robert M. Timblin	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 August 2006</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-23</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>9/8/2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action corresponds to application 10/713,623 and applicant's

remarks/amendments filed 8/29/2006.

Response to Amendment

Drawings

With amendments made to the specification under the Examiner's request, the

drawings are now accepted. Furthermore, the drawings submitted 9/8/06 are also

accepted by the Examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The Examiner thanks the Applicant for the explanation and clarity for

claims 1-22 indicating a concrete and tangible result. Claims 1-22, however, remain

rejected as being not statutory under 35 USC 101 for the following reasons:

Claim 1 recites a system claim. As can be broadly interpreted, this system

is still does not clearly defined include hardware. The closest element of this claim to

even resemble computer hardware is the user interface. However, as not being clearly

defined in the claims as part of a computer system or a client-server system etc..., this

user interface could easily be interpreted to mean anything a user interacts with in the system (i.e. a screen, even a filing cabinet in a business). As claims 2-10 depend from claim 1 and claims 11-21 are similar, they incorporate the same rejection.

Claim 22 remains rejected for being not-statutory. Specifically, as broadly construed from [0039] of the present application, a machine-readable medium can refer to a signal. A signal claimed by itself fails to be in one of the four categories of invention. Without being stored on a hardware of a computer (i.e. a machine-readable *storage* medium), the claimed medium is also non functional and therefore not statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by **Cloud et al.** (Cloud hereinafter) (US Patent 5,634,127).

With respect to claims 1, 4, 10, 22 and 23 **Cloud** teaches a system comprising:

'**a user interface configured to collect data from a user**' as can be seen in figure 4 (item 400).

'**business logic configured to process data collected by the user interface**' as a server connectivity layer works with a work flow management layer to permit

connectivity to back end applications (col. 7 lines 50-56 and figures 4 and 6). **Cloud**

teaches more on business logic with respect to server agents (col. 12 lines 25-31 and

figure 6).

'**an intermediate layer interposed between the user interface and the**

business logic' as a workflow management layer (col. 7 lines 45-56 and figures 4 and

6).

'**configured to rearrange data collected by the user interface into a format**

that is optimized for processing by the business logic <u>wherein the user interface</u>

<u>is further configured to present processed data to the user</u>' as a request message

from a client is translated (col. 3 lines 60-65). For example, **Cloud** teaches that a Client

sends a sign-on request message. Then a Client Agent program is initiated and any

data conversions or protocol specific logic is performed at this time (col. 12, line 66-col.

13 line 4).

With respect to claim 2, **Cloud** teaches '**the system is configured to conduct a**

data flow between the user interface and the business logic through the

intermediate layer' as a description of work flow management (starting on col. 12,

line32 and figure. 4)

With respect to claim 3, **Cloud** teaches '**the data flow is initiated by one or**

more actions of the user interface, wherein the one or more actions comprise any

one of an opening of a user interface and an entering of data in the user interface'

as the workflow Manager is initiated by a request message which it receives as input (col. 9, lines 28-29)

With respect to claim 5, **Cloud** teaches **'the intermediate layer is configured to provide a buffering of data flow between the user interface and the business logic'** as messages from a client can be directed to a store and forward queue (col. 4 lines34-39). Cloud further teaches a message buffer (col. 19, lines 10-22).

'the buffering of data flow enables the system to perform batch processing of a plurality of business processes' as batch workflow object generation (col. 18, lines 52-57).

With respect to claim 7, **Cloud** teaches **'the intermediate layer is configured to perform one or more operations on one or more objects to reduce an amount of business processes performed by the business logic, wherein the one or more operations on the one or more objects comprise collecting and formatting one or more classes of objects** as defining and generating data definitions of all input and of different types (col. 10, lines 50-56).

With respect to claim 8, **Cloud** teaches **'an object model controller to associate the data from the user interface with an object, wherein the intermediate layer is configured to receive the object from the object model controller'** as the process of building a workflow object. Within this process, message

layouts contain field definitions for incoming and outgoing messages (col. 17 line 45 –

col. 18 line 20 and figures 12-13).

With respect to claim 9, **Cloud** teaches '**the data requests comprise any one**

of a read data request, a modify data request, and an insert data request, and

wherein the object model controller further comprises an object-oriented

interface' (figures 12-13).

With respect to claim 11, this claim contains essentially the same subject matter

as that of claim 1 and therefore is rejected for the same reasons by **Cloud**.

Furthermore, Cloud teaches <u>processing one or both of the data and instructions in the</u>

<u>layer of business logic</u> as a message handler 633 formats data to be sent to back end

servers (col. 12, lines 25-31)<u>;</u>

<u>and sending one or both of the processed data and processed instructions from</u>

<u>the layer of business logic to the user interface</u> as information retrieved form back-end

servers may be integrated into a single reply message (Cloud, abstract)

With respect to claim 12, **Cloud** teaches '**processing any one of the data and**

instructions in the layer of business logic' as a server processes the server request

(col. 3 lines 64-67).

'**and sending any one of processed data and processed instructions from**

the layer of business logic to the user interface, wherein the sending of any one

of processed data and processed instructions comprises passing the any one of

processed data and processed instructions through the intermediate layer' as the

completed message is sent back to the client (col. 8 lines 60-67).

With respect to claim 13, **Cloud** teaches **'associating an object with the data**

received in the user interface, wherein the intermediate layer is further configured

to perform one or more operations on the object' as the process of building a

workflow object (col. 17 line 45 – col. 18 line 20 and figures 12-13).

With respect to claim 14, **Cloud** teaches **'the object model controller is**

configured to allow a user to prevent other users from modifying data until a save

data instruction is received in the user interface' as validating a session control

request (col. 13, lines 5-22). Cloud teaches a save data instruction as a Save Request

(col. 19 line 64-col. 20 line 35). Also within these paragraphs, Cloud notes that in

browse mode, data values are not modifiable.

With respect to claim 15, **Cloud** teaches **'the intermediate layer is configured**

to perform the following operations: receiving an instruction from the object

model controller; performing one or more operations relating to the received

instruction; and issuing one or more instructions to the layer of business logic'

as the work flow management layer mediates between the client connectivity layer and

server connectivity layer performing the workflow management functions (col. 7, lines 30-36).

With respect to claim 16, **Cloud** teaches '**the intermediate layer determines whether the received instruction from the object model controller comprises any one of a known object, an unknown object, or a modification of a known object'** as updated field values are applied (col. 20, lines 20-30).

With respect to claim 17, **Cloud** teaches '**the intermediate layer is further configured to perform any of the following operations: instructing the layer of business logic to approve previous instructions and data entries; instructing the layer of business logic to save data in a database; and initializing a framework to enable a user to perform data entry'** a save request (col. 19 lines 64-65 and the data stores of figures 9 and 12).

With respect to claim 18, **Cloud** teaches '**sending the data from the layer of business logic to a database'; and saving the data in the database upon receiving the data from the layer of business logic'** (fig. 12).

With respect to claim 19, **Cloud** teaches '**the intermediate layer is configured to optimize one or more processes in the layer of business logic'** as taught in the rejection of claim 1.

'**the intermediate layer enables batch processing of data entered in the user
interface**' as batch workflow object generation (col. 18, lines 52-57).

With respect to claim 20, **Cloud** teaches '**the intermediate layer maintains
data entries and modifications among various object classes, and wherein the
layer of business logic comprises common business functions and applications**'
as applications at the business level (col. 2 lines 30-32).

With respect to claim 21, **Cloud** teaches '**one or more actions of the user
interface comprise any one of an opening of the user interface and a data entry in
the user interface**' as user of a common user interface when accessing a system of
computers (col. 3 lines 42-45).

With respect to claims 22 and 23, the limitations of these claims are essentially
the same as those of claims 1-21 above and therefore are rejected for the same
reasons in view of **Cloud**.

Response to Arguments

Applicant's arguments filed 8/29/2006 have been fully considered but they are
not persuasive.

Applicant argues on page 14 of the remarks that 1) Cloud does not disclose or
suggest the recited business logic layer and that the server layer is not the business

logic layer. Moreover, 2) Cloud is silent about disclosing an intermediate layer for the purpose of rearranging "data collected by the user interface into a format that is optimized for processing by the business logic." Furthermore, 3) Cloud's workflow management layer does not disclose or suggest the claimed intermediate layer. The Examiner respectfully disagrees. The reasons are set forth hereafter:

1) The server layer of Cloud correlates to the business layer of the claimed invention. In general, Cloud is oriented towards facilitating business process re-engineering. Business requests in the form of messages from clients are passed on to a workflow management layer (col. 7 lines 58-63). The workflow management layer works with the server connectivity layer to permit connectivity to back end applications. The server agents in the server connectivity layer *process* the incoming messages. As an example, of the server agents 630, message handler 633 formats (i.e. process) the data to be sent to back end servers (col. 12, lines 25-31). In conclusion the server connectivity layer correlates to the business logic layer of claim 1 because this layer processes the incoming business request message. Furthermore as stated in claim 6 of applicant's invention, "the business logic comprises a general business logic layer for common business functions and applications..." The server connectivity layer still correlates to this business logic layer as it used to permit connectivity to back en applications (col. 7 lines 51-57).

2) The examiner respectfully submits that Cloud still teaches an intermediate layer for the purpose of rearranging "data collected by the user interface into a format that is optimized for processing by the business logic" as a workflow management layer

(col. 7 lines 45-56 and figures 4 and 6). Specifically a request (data collected) is received from a client in the form of a message (col. 7 lines 60-63). One way in which this request is rearranged is that it is translated by an MDP (col. 3 lines 60-67). Furthermore, data collected by the user interface is rearranged is taught by Cloud in column 7 lines 45-50. Therein, a request message is decomposed into individual transactions and recomposed into one or more replies.

3) Cloud's workflow management layer doe suggest the claimed intermediate layer, which prepares data collected from the user interface into a format that is optimized for processing in the business logic layer. From the argument in 2 above, it is implied by Cloud that the data collected from the user (request) is prepared into a format optimized for processing. For instance, the step of decomposing a *complex* request and recomposing suggests to the examiner that the request is prepared into a format so that the server connectivity layer can easily manage the request for back end applications.

The applicant also argues on page 15, that in respect to claim 14, Cloud is silent about preventing a user from actually "modifying data until a save data instruction is received from the user interface". The Examiner disagrees as a user can toggle between Update Mode and Browse mode. In Update mode, the field data values are modifiable (col. 20 lines 22-25). As a user can toggle between these two options it is suggested that the end user makes the decisions for the data. When in Browse mode,

the data can't be modified. When in update mode data can then be saved and therefore updated (col. 20 lines 22-26).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Timblin

Patent Examiner AU 2167

RMT
11/1/2006

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PRIMARY EXAMINER